because the cost allocations have no effect on the prices charged for regulated services."[11] Both reach these conclusions on grounds that, in Dr. Taylor's words, "[p]rice cap regulation breaks the link between prices and costs for regulated services."[12]

Yet, it is clear that price cap regulation, though an improvement over rate of return regulation, does not break the link between prices and costs. Price cap regulation can best be regarded as resembling rate-of-return regulation with a formal time lag. Price cap regimes typically specify a set of prices with upward adjustments for inflation and downward adjustments to reflect productivity growth. Abstracting from changes to reflect other exogenous factors, consumers can expect real prices to fall depending on the size of the productivity growth factor -- commonly called the "X-Factor." The price cap regime is subject to formal review generally at specified intervals (typically three or four years) whereupon past performance is evaluated (including the historic rate of return) and adjustments made in the productivity factor and other elements of the formula to bring the projected rate of return in line with what regulators would regard as just and reasonable. In no sense can the company's prices be regarded in the long-run as frozen irrespective of costs.

Notably, Professor Alfred Kahn, in an earlier proceeding, agrees with Dr. Taylor that "[i]n its pure form direct price regulation eliminates any entitlement of regulated companies to recover from monopoly customers any reductions in rate of return resulting from price cuts in competitive markets."[13] But Professor Kahn goes on to observe that:

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[11]Taylor Affidavit at 5.

[12]*Id.*

[13]Statement of Alfred E. Kahn, FCC CC Docket 94-1, June 28, 1994, p. 13, in Bell Atlantic *ex parte* submission to FCC, September 23, 1994.

> To be sure, we have to my knowledge yet to see a scheme of pure price regulation. All of the schemes of which I am aware contemplate review within a few years of how they are working. Since the indexation formulas are inevitably based on estimates--in particular, estimates of how the costs of the regulated companies may be expected to behave relative to the basis for indexation (such as the Consumer or GNP price index)--it is difficult to imagine a scheme under which the government would surrender for all time the option of testing the accuracy of those estimates against actual experience. Such reexaminations have typically involved some correction of the formula if profits prove to be too high or too low--in which event price regulation turns out to resemble rate of return regulation.[14]

Pure price caps do not exist nor can they reasonably be expected to exist because regulators cannot ignore the company's profits and losses. If profits are persistently high, regulators would be under strong public pressure to revise the price cap formula. Conversely, low profit levels or losses would bring pressure to adjust the formula in the other direction.

The presence of such adjustments is starkly illustrated by the California PUC decision in late 1995 to impose a rate freeze -- pending future review -- as a substitute for the previous 5 percent productivity factor set for Pacific Bell's noncompetitive intrastate services. The rate freeze is equivalent to establishing a productivity factor equal to the rate of inflation. With inflation currently at about 3 percent, the PUC's decision in effect reduces the productivity factor from 5 percent to 3 percent. The California PUC based its decision in part on grounds that "[t]his policy offers an opportunity of fair returns to shareholders [my underlining] by moving regulation of local exchange carriers in a market direction."[15] The PUC further concluded that "in an era in which the price cap formula is producing price reductions [underlining in original], the resulting

[14]Alfred E. Kahn, Review of Regulatory Framework, Canadian Radio-television and Telecommunications Commission, Telecom Public Notice CRTC 92-12. Filed on behalf of AGT, April 13, 1993 p. 21. Emphasis in original.

[15]California PUC, *Interim Opinion*, I.95-05-047. December 26, 1995 at 2.

declines in revenues can jeopardize a firm's ability to finance capital investments, particularly infrastructure."[16] This action is not unlike what one would expect with cost-based rate-of-return regulation, where regulators' decisions about future pricing policies take into account concerns about the firm's financial condition.

Dr. Taylor's assertion that price caps break the link between prices and costs is based solely on his terse description of the Commission's price cap regime for LEC interstate carrier access charges, for which he observes "[r]ecently, nearly all of the price cap regulated LECs selected pure price cap regulation; i.e., the price cap option with the highest productivity offset and no sharing requirement."[17]

Even for the Commission's price cap regime with which Dr. Taylor is concerned, it is useful to demonstrate that, contrary to his assertion, the link between prices and costs is <u>not</u> broken. Under the Commission's regime, modified by the interim price cap plan adopted in March 1995,[18] each LEC has a choice among three X-Factors. The smallest X-Factor -- 4 percent -- carries with it the obligation of 50-50 sharing of earnings between a 12.25 percent and a 13.25 percent rate of return, and 100 percent sharing above 13.25 percent. The next largest X-Factor -- 4.7 percent -- includes 50-50 sharing for rates of return between 12.25 and 16.25 percent, and 100 percent sharing with rates above 16.25 percent. Both of these X-Factors include a "low end" adjustment mechanism whereby the LEC may obtain an above-cap price adjustment if its rate of return falls below 10.25 percent. The third and largest X-Factor of 5.3 percent involves no sharing, nor a low end adjustment.

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[16]*Id.* at 2, 3.

[17]Taylor Affidavit, at 5.

[18]*In the Matter of Price Cap Performance Review for Local Exchange Carriers*, 10 F.C.C.R. 8961 (1995).

The low end adjustment is a striking example of how the Commission has failed to decouple costs and prices. If, under the first two options, the carriers' rate of return falls below 10.25 percent, perhaps because of aggressive battles with competitors with the LEC engaging in below-cost pricing, it is "entitled to adjust its rates upward to target earnings to an amount not to exceed the lower mark [10.25 percent]."[19] The Commission defends this "limited upward adjustment" on grounds that it "should ensure that the LEC will remain healthy and able to provide needed services, while retaining substantial incentives to take the action necessary to improve its performance and thereby raise its earnings above this minimal level."[20] Perhaps so, but this adjustment illustrates stunningly the fact that because regulators cannot ignore the firm's financial condition, they cannot adopt a price cap regime that truly decouples prices and costs.

As a second illustration, suppose that an LEC selects the second option of 4.7 percent and has a rate of return of 13 percent which, since it is above 12.25 percent, requires 50-50 sharing. If the LEC then engages in cross-subsidization, its rate of return will fall, let us say, to below 12.25 percent. At the same time, the up-front loss caused by cross-subsidization is partially compensated by the elimination of sharing (and the corresponding additional decrease in prices that would have been required in the absence of cross-subsidization). The LEC may conclude that the long term strategic advantage of cross-subsidization more than offsets the near-term reduction in its rate of return, when part of this reduction is offset by the elimination of sharing.

Consider another possibility where the LEC selects the 5.3 percent X-Factor with no sharing, in order to protect its higher rate of return, let us say, of 16 percent. Because it has the option of later moving to another X-Factor, it may be encouraged to take risks, including risky

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[19] *In the Matter of Policy and Rules Concerning Rates for Dominant Carriers*, 5 F.C.C.R. 6786, 6802, at ¶127 (1990).

[20] *Id.*

ventures involving cross-subsidization. With the up-front costs of cross-subsidization, its rate of return falls to, say, 12.25 percent. In response, it shifts to the 4 percent X-Factor option which not only involves no sharing at that rate of return, but also a much smaller subsequent annual reduction in real prices (4 percent instead of 5.3 percent). Thus, its cross-subsidized venture results in a burden being placed on telephone ratepayers, reflected in smaller price decreases than otherwise would have existed.

This outcome would have been prevented if the LEC had been forced to retain the 5.3 X-Factor until the time that effective competition emerges. In contrast, however, the Commission currently permits carriers to select a new X-Factor annually. It is aware that "permitting a carrier to change its choice of X-Factor annually could create opportunities for abuse," and it is inquiring into the issue of how much flexibility the LECs should have to change their selections.[21] Judged by its interim plan, however, the Commission is a long way from establishing a single X-Factor, with no sharing or low end adjustment, while retaining that X-Factor (or with modifications entirely outside the control of individual LECs) until the LEC faces effective competition in its existing monopoly or near monopoly markets.

Of central relevance, however, is not the Commission's price cap regime for the LEC's interstate services, but rather the price cap regimes imposed by the states for basic local exchange services within which the LECs retain a core monopoly. Both Dr. Taylor and Mr. Sidak are silent about the characteristics of state price cap plans, e.g., the extent to which sharing exists, any notable provisions that either strengthen or weaken their effectiveness, or the extent of geographical coverage. This is a curious omission, since they place such emphasis on price caps as a safeguard against cross-subsidy.

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[21] *In the Matter of Price Cap Performance Review for Local Exchange Carriers*, 10 F.C.C.R. 13659, 13678, at ¶¶119-120 (1995).

The Role of Local Competition

In cases where price cap programs do not include sharing or where rate of return regulation is still in effect, Mr. Sidak has a quick response: abolish the Commission-imposed cost allocations scheme anyway, because the LECs already face sufficient competition to forestall any serious threat of cross-subsidy. In this view, whether effective price caps exist becomes essentially irrelevant because, at bottom, markets are sufficiently competitive to obviate the need for regulatory intervention.

Mr. Sidak fails to account, however, for the core monopoly that remains in basic local switched services, particularly for residential and small business users. He notes that "[b]usiness customers have an expanding range of alternatives to voice and data services traditionally provided by the LECs."[22] Even so, how many residents in the United States today have a choice among local exchange carriers? Cable companies and others are in the early stages of offering local exchange service; but how quickly these services expand to encompass substantial numbers of residential customers remains to be seen. The point need not be belabored that numerous obstacles must be overcome -- as highlighted in the Commission's ongoing proceeding dealing with implementation of the local competition provisions of the Telecommunications Act of 1996.

A Question of Timing

The primary difference in policy recommendations between Mr. Sidak and myself involves timing. He urges the immediate lifting of the Commission's cost allocation procedures, based on growing competition in business markets and plans for competitive expansion, while I opt for continued government intervention in response to the remaining core monopoly in local exchange

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[22]Sidak Affidavit at 16.

services. As I have previously stated, "evolving market pressures are reducing the ability of LECs to cross-subsidize" because "the pool of potential LEC monopoly revenues available to absorb cost shifting is shrinking."[23] This situation arises because of financial pressures in business markets, as Mr. Sidak also emphasizes. I go on to note that the "[t]hreat of cross-subsidy is less today than previously, and it will continue to diminish."[24] Nevertheless, the threat today remains substantial because of the monopoly still held by the LECs.

We can all wish for the continuing erosion and eventual disappearance of monopoly and for the full deregulation thereby afforded. In the meantime, government intervention will be needed in ways that, we can all hope, will be well crafted to serve the public interest.

June 10, 1996

[23]Leland L. Johnson, *Toward Competition in Cable Television* (MIT Press and AEI Press, 1994) at 80.

[24]*Id.* at 81.